

## BEES FROM BRITISH GUIANA

By THEO. D. A. COCKERELL

Owing to increased transportation facilities, it is now comparatively easy for an entomologist living in New York or New England to go on a collecting trip to the West Indies or northern South America. Such an expedition should delight any student of insects, the fauna being so rich in large and beautiful species, many of which have interesting habits. A committee of specialists should be formed to prepare a manual, with illustrations, describing the principal members of this neotropical fauna. It will be found that most of the more conspicuous species were described by the fathers of entomology, such as Drury, Fabricius and Latreille. There are, however thousands of rarer or less conspicuous forms which still await discovery and description, so that even a short visit may be productive of very interesting results.

Mr. and Mrs. J. Ogilvie, who collected so many bees in Africa, are now in British Guiana, and a small consignment received from them includes the following.

(A.) Onverwagt, 54 miles east of Georgetown. December 14-15.

*Xylocopa barbata* (Fabricius). A small carpenter bee with dense pure white hair on cheeks.

*Xylocopa fimbriata* (Fabricius). A large black bee with shining green wings.

*Centris versicolor* (Fabricius).

*Centris obscuriventris* Friese. This seems to be only a variety of the last, as Friese himself supposed.

*Florilegus pavoninus* Cockerell. One female. Described from Ecuador.

*Melipona favosa* Fabricius. Male.

*Halictus guianensis* sp. n.

*Megachile luctifera* Spinola. A beautiful species, with pure white bands on abdomen, and black ventral scopa.

*Megachile laticincta* sp. n.

(B.) Plu Ruimveldt, one mile south of Georgetown. Dec. 19.

*Euglossa cordata* (Linnaeus). A splendid green bee.

*Xylocopa barbata* (Fabricius).

*Xylocopa fimbriata* (Fabricius).

*Melitoma euglossoides* Lepeletier and Serville.

*Megachile rufobarbata* sp. n.

***Megachile laticincta* sp.n.**

Female. Length 13 mm.; robust, with heart-shaped abdomen, the sixth tergite nearly in a straight line with those before, but somewhat ascending at end; black, without metallic tints; mandibles and scape black, flagellum obscurely rufescent beneath; tegulae ferruginous; wings dusky hyaline, with red stigma and brown nervures, the outer ones dark; ventral scopa long and white, black on last sternite, and black hair along sides; sternites not banded under the scopa. Head broad, but facial quadrangle longer than broad; mandibles broad, quadridentate, the second and third teeth broadly triangular (mandible much as in *M. kartaboensis* Mitchell, but bee quite different); clypeus short and broad, densely punctured at sides, in middle polished between the punctures, with a rather poorly developed smooth band; middle part of margin of clypeus finely denticulate (style of *M. affabilis* Mitchell); sides of face with white hair, not conspicuous; clypeus with very inconspicuous pale hair and some very long dark hairs; front, occiput and cheeks with pale fulvous hair, on vertex it is browner; mesothorax very closely and finely punctured, a little shining on disc posteriorly, and anteriorly with a smooth line; hair of thoracic dorsum in front, at sides (over tegulae) and on scutellum abundant and rufofulvous, but disc of mesothorax with thin whitish hair, only conspicuous in certain lights; sides of thorax with fulvous hair above, white below; scutellum dull and very finely punctured, with a smooth median line; legs black; hind basitarsi broad, but not quite as broad as tibiae; front legs with last tarsal joint red; tarsi with rather thin pale hair; first tergite with long fulvous hair; second to fifth with very broad pale yellow bands of tomentum, interrupted in middle; last sternite hairy to end.

British Guiana: Onverwagt, Dec. 15, 1935 (J. Ogilvie). Resembles *M. maculata* Smith (*anthidioides* Rad.), but that has the last two sternites black-haired. There is a strong general resemblance to *M. fossoris* Smith (*leucocentra* Schrottky), but that has black hair on the two last sternites, and narrower abdominal bands.

***Megachile rufobarbata* sp.n.**

Female. Length about 11 mm.; rather slender, with stout but subparallel-sided abdomen, the last tergite rapidly descending, straight in profile; black, including mandibles, antennae and tegulae, the margins of tegulae narrowly

reddish; legs black; wings dusky, with a very dark cloud in upper half of margined cell, and beyond the cell; ventral scopa white, with short black hair at end of last sternite, which is hairy to the end. Head broad; facial quadrangle approximately square; mandibles broad, with oblique margin; two strong apical teeth, and from the second a concave ridge to the poorly developed inner tooth (the inner angle), but set in this a broadly truncate tooth or lamella; cheeks and sides of face with snow-white hair; long red hairs projecting from beneath clypeal margin; clypeus very short and broad, very densely punctured, not shining, with pale hair at sides, and long black hairs on disc; clypeal margin in middle thickened, shining, and gently undulate; supraclypeal area shining in middle, strongly punctured at sides; vertex very finely and closely punctured; front and vertex with sparse long black hair; mesothorax and scutellum dull, the punctures excessively minute; a conspicuous slender white band in suture between mesothorax and scutellum; no distinct smooth line but a faint groove in middle of mesothorax; mesothorax and scutellum with sparse black hairs, but thorax with white hair in front; hair of pleura dull white, but a dense and very conspicuous white tuft on tubercles; a band of light hair above tegulae; legs with white hair, orange on inner side of tarsi; spurs light red; hind basitarsi only moderately broad, but long; second to fifth tergites with narrow entire very pale fulvous bands, and a spot of the same at each side of first; apical tergite with fine white tomentum.

British Guiana: Plu Ruimveldt, Dec. 19, 1935 (J. Ogilvie). Related to *M. brethesi* Schrottky, which I saw in the Paris Museum. It agrees in having the wings dark fuliginous along the costa, and the white hair of cheeks and sides of face. *M. brethesi* has narrow white bands on the first three tergites. There is a superficial resemblance to *M. tuxtla* Cresson.

**Halictus (Chloralictus) guianensis** sp.n.

Female. Length about 5 mm.; head and thorax green, abdomen black; head broad-oval, with the clypeus strongly produced; more than lower half of clypeus black, shining, with very coarse punctures; mandibles with the apical half red; flagellum red beneath except basally; face below antennae shining, evidently green, but front dull and blackish, its lower part shining; mesothorax dullish, olive green, with small punctures; scutellum rather more shining; area of metathorax dull, bluish; mesopleura dark green; tegulae dark brown; wings hyaline, with dull pale red stigma and pale nervures, the outer recurrent and intercubitus evanescent; hair of head and thorax thin and dull white; legs black, with the small joints of tarsi more or less pallid; abdomen shining, without hair-bands; hind margins of tergites slightly pallid. Microscopical characters: face below antennae rather sparsely punctured; front densely punctured, not striate; scape with minute shallow punctures.

tures; fourth antennal joint very short, about twice as broad as long, fifth a little shorter than third; region behind middle ocellus with very few minute punctures; mesothorax, minutely reticulated all over, with rather sparse minute punctures; scutellum with larger and sparser punctures on disc than on hind part of mesothorax, but in the middle the punctures are relatively crowded; area of metathorax semilunar, well defined, with rather weak, not dense, radiating plicae which reach the margin, best developed at sides; tegulae large, impunctate, dark brown marked with pale reddish; hind spur with three stout blunt spines.

British Guiana: Onverwagt, Dec. 14 (J. Ogilvie). Seven, all but two in bad condition. The dull mesothorax and other characters at once separate this from *H. potaroensis* Ckll. The face is narrower and the clypeus more produced than in *H. paitensis* Ckll. The longer head and dull mesothorax at once separate it from such species as *H. balboae* Ckll., *H. hypochlorus* Ellis, and *H. chrysonotus* Ellis. There are several points of resemblance to *H. lessepsi* Ckll., but that has dusky wings, with very dark brown stigma.